

The principles of this invention having been fully explained in connection with the foregoing, I hereby claim as my invention:

1. An improved showerhead for receiving a rinsing system, wherein the rinsing system has a flexible conduit, said showerhead
5 comprising

a hollow outer casing having a first end and a second end,
an inner casing mounted within said outer casing such that a
flow cavity is defined therebetween, said inner casing
defined by a first end, a second end and an inner cavity
10 disposed between the first and second ends of the
inner casing, said first end having at least one aperture
for fluid communication between said flow cavity and
said inner cavity,

a valve runner slidingly contained within the inner cavity of
15 said inner casing, said valve runner defined by a first
end, a second end, a first bore extending axially
inwardly from the first end, a second bore extending
axially inwardly from the second end, and means for
sealing the second bore when the valve runner is in a
20 first position within the inner cavity,

means for constraining said valve runner within said cavity
and for receiving the flexible conduit, and

fluid inlet means adjacent the first end of said outer casing,
said fluid inlet means in fluid communication with the
first bore of said valve runner for supplying fluid to the
first bore,

5 wherein said valve runner is slidable within the inner cavity
from the first position in which the means for sealing seats within
the inner cavity such that fluid flow is directed from the fluid inlet
means, through the at least one aperture in the first end of said
inner casing and into the flow cavity, to a second position in which
10 the fluid flow is directed from the fluid inlet means through said first
and second bores of the valve runner and to the flexible conduit.

2. The improved showerhead of claim 1 including means
for sealing the at least one aperture of the first end of the inner
casing when the valve runner is in the second position.

15 3. The improved showerhead of claim 2 wherein the
aperture sealing means comprises a circumferential flange
surrounding the valve runner wherein fluid communication
between the valve runner first bore and the at least one aperture of
the inner casing is prevented.

20 4. The improved showerhead of claim 1 including an
attachment housing engaged with the second end of said inner
casing such that said runner is constrained within the inner cavity

of said inner casing, said attachment housing having an axial bore therethrough.

5 5. The improved showerhead of claim 1 wherein said inner casing further includes a circumferential flange extending outward from the second end of said inner casing, the circumferential flange having apertures therethrough, wherein said flange attaches to the second end of said outer casing.

10 6. The improved showerhead of claim 1 wherein said attachment housing further comprises means for receiving a rinsing system such that when the rinsing system is received by the attachment housing, said runner valve is urged to the second position.

15 7. The improved showerhead of claim 1 wherein said valve runner includes means for sealing the at least one aperture of the first end of the inner casing when the valve runner is in the second position.

20 8. The improved showerhead of claim 1 wherein said valve runner includes a circumferential flange surrounding the valve runner wherein fluid communication between the valve runner first bore and the at least one aperture of the inner casing is prevented.

9. The improved showerhead of claim 1 wherein the valve runner comprises a central plug having a first end and a second end, a first interior passage having an inlet and an outlet, and a second interior passage having an inlet and an outlet.

5 10. The improved showerhead of claim 9 wherein the central plug of the valve runner extends longitudinally along an axis and has an exterior surface, the first interior passage of the valve runner is aligned along the axis of the plug, the inlet extends from the first end, and the outlet extends radially outwardly from the axis of the plug, has a slot shape and is in fluid communication with the exterior surface of the plug.

10 11. The improved showerhead of claim 10 wherein the second interior passage of the valve runner is aligned along the axis of the plug, the outlet extends from the second end, and the inlet extends radially outwardly from the axis of the plug, has a slot shape and is in fluid communication with the exterior surface of the plug.

15 12. The improved showerhead of claim 11 wherein the valve runner includes a plug sleeve surrounding the plug, the sleeve having a first end and a second end, and a first and second circumferential flange being situated at the second end of the sleeve.

5

13. The improved showerhead of claim 12 wherein the first plug sleeve flange is disposed on the surface of the plug to one side of the first interior passage outlet and the second plug sleeve flange is disposed on the surface of the plug to the other side of the first interior passage outlet.

14. The improved showerhead of claim 13 wherein the first plug sleeve flange has a first diameter and the second plug sleeve flange has a second diameter, the second diameter being greater than the first diameter.

10

15. The improved showerhead of claim 14 wherein the inner casing includes a shoulder member against which the second plug sleeve may sealingly rest when the valve runner is in its second position.

15

16. The improved showerhead of claim 15 wherein the plug sleeve is comprised of a resilient material.

17. An improved showerhead for receiving a conduit attachment, said showerhead comprising

a hollow outer casing having a first end and a second end,

an inner casing mounted within said outer casing such that a

20

flow cavity is defined therebetween, said inner casing defined by a first end, a second end and an inner cavity disposed between the first and second ends of the

inner casing, said first end having at least one aperture for fluid communication between said flow cavity and said inner cavity,

a valve runner slidingly contained within the inner cavity of said inner casing, said valve runner defined by a first end, a second end, a first bore extending axially inwardly from the first end, a second bore extending axially inwardly from the second end, and means for sealing the second bore when the valve runner is in a first position within the inner cavity,

means for sealing the at least one aperture of the first end of the inner casing when the valve runner is in a second position,

means for constraining said valve runner within said cavity and for receiving the conduit attachment, and

fluid inlet means adjacent the first end of said outer casing, said fluid inlet means in fluid communication with the first bore of said valve runner for supplying fluid to the first bore,

wherein said valve runner is slidable within the inner cavity from the first position in which the means for sealing seats within the inner cavity such that fluid flow is directed from the fluid inlet

means, through the at least one aperture in the first end of said inner casing and into the flow cavity, to the second position in which the fluid flow is directed from the fluid inlet means through said first and second bores of the valve runner and to the conduit attachment.

18. The improved showerhead of claim 17 wherein the aperture sealing means comprises a circumferential flange surrounding the valve runner wherein fluid communication between the valve runner first bore and the at least one aperture of the inner casing is prevented.

19. The improved showerhead of claim 17 including an attachment housing engaged with the second end of said inner casing such that said runner is constrained within the inner cavity of said inner casing, said attachment housing having an axial bore therethrough, and said inner casing further including a circumferential flange extending outward from the second end of said inner casing, the circumferential flange having apertures therethrough, wherein said flange attaches to the second end of said outer casing.

20. The improved showerhead of claim 19 wherein said attachment housing further comprises means for receiving a rinsing system such that when the rinsing system is received by

the attachment housing, said runner valve is urged to the second position.

5 21. The improved showerhead of claim 17 wherein said valve runner includes means for sealing the at least one aperture of the first end of the inner casing when the valve runner is in the second position.

10 22. The improved showerhead of claim 17 wherein said valve runner includes a circumferential flange surrounding the valve runner wherein fluid communication between the valve runner first bore and the at least one aperture of the inner casing is prevented.

23. The improved showerhead of claim 17 wherein the valve runner comprises

15 a central plug having a first end and a second end, a first interior passage having an inlet and an outlet, and a second interior passage having an inlet and an outlet,

the central plug of the valve runner extends longitudinally along an axis and has an exterior surface,

20 the first interior passage of the valve runner is aligned along the axis of the plug, the inlet extends from the first end, and the outlet extends radially outwardly from the axis of the plug, has

a slot shape and is in fluid communication with the exterior surface of the plug, and

the second interior passage of the valve runner is aligned along the axis of the plug, the outlet extends from the second end, and the inlet extends radially outwardly from the axis of the plug, has a slot shape and is in fluid communication with the exterior surface of the plug.

24. The improved showerhead of claim 23 wherein the valve runner includes a plug sleeve surrounding the plug, the sleeve having a first end and a second end, and a first and second circumferential flange being situated at the second end of the sleeve.

25. The improved showerhead of claim 24 wherein the first plug sleeve flange is disposed on the surface of the plug to one side of the first interior passage outlet and the second plug sleeve flange is disposed on the surface of the plug to the other side of the first interior passage outlet.

26. The improved showerhead of claim 25 wherein the first plug sleeve flange has a first diameter and the second plug sleeve flange has a second diameter, the second diameter being greater than the first diameter.

27. The improved showerhead of claim 26 wherein the inner casing includes a shoulder member against which the second plug sleeve may sealingly rest when the valve runner is in its second position.

5

28. The improved showerhead of claim 27 wherein the plug sleeve is comprised of a resilient material.